



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: **UT-0037**

Inventors: **Rao et al.**

Serial No.: **10/025,333**

Filing Date: **December 19, 2001**

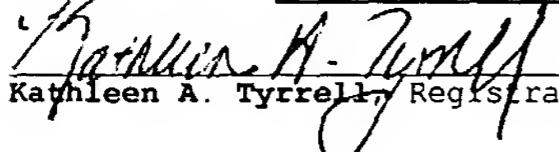
Examiner: **Not Yet Assigned**

Group Art Unit: **Not Yet Assigned**

Title: **Generation, Characterization and  
Isolation of Neuroepithelial Stem Cells  
and Lineage Restricted Intermediate  
Precursor**

I, **Kathleen A. Tyrrell**, Registration No. 38,350, certify that this correspondence is being deposited with the U.S. Postal Service as First Class mail in an envelope addressed to the Assistant Commissioner for Patents and Trademarks, Washington, D.C. 20231.

On this date: **February 6, 2002**

  
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Kathleen A. Tyrrell, Registration No. 38,350

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

**(XX)** In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

- In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
  - Certification in Accordance with §1.97(e) is set forth below; or
  - The fee of \$180.00 as set forth in §1.17(p) is attached.
- In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).
- Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.
- In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified)

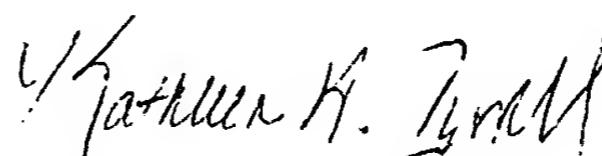
are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 08/852,744, filed May 7, 1997, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

**(XX)** All listed references are in the English language.

Respectfully submitted,

  
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Date: February 6, 2002

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PTO-1449	U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. UT-0037	SERIAL NO. 10/025,333
LIST OF PRIOR ART CITED BY APPLICANT		APPLICANT Rao, et al	
		FILING DATE December 19, 2001	GROUP Not Yet Assigned

U. S. PATENT DOCUMENTS

EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA	5,589,376	Dec. 31, 1996	Anderson, et al			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO

OTHER PRIOR ART (Including Author, Title, Pertinent Pages, Etc.)

AG	Gage, F.H., et al. <i>Isolation, Characterization and Use of Stem Cells from the CNS</i> . 18 Ann. Rev. Neurosci. 159-92 (1995)
AH	Marvin, M., et al. <i>Multipotential Stem Cells in the Vertebrate CNS</i> . 3 Semin. Cell. Biol. 401-11 (1992)
AI	Davis, A.A., et al. <i>A Self-Renewing Multipotential Stem Cell in Embryonic Rat Cerebral Cortex</i> . 362 Nature 363-72 (1994)
AJ	Gritti, A.G., et al. <i>Multipotential Stem Cells from the Adult Mouse Brain Proliferate and Self-Renew in Response to Basic Fibroblast Growth Factor</i> . 16 J. Neurosci. 1091-1100 (1996)
AK	Reynolds, B.A., et al. <i>A Multipotent EGF-Responsive Striatal Embryonic Progenitor Cell Produces Neurons and Astrocytes</i> , 12 J. Neurosci. 4565-74 (1992)
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AM	Williams, B.P., et al. <i>The Generation of Neurons and Oligodendrocytes from a Common Precursor Cell</i> . 7 Neuron 685-93 (1991)
AN	Kilpatrick, T.J., et al. <i>Cloned Multipotential Precursors from the Mouse Cerebrum Require FGF-2, Whereas Glial Restricted Precursors are Stimulated with Either EGF-2 or EGF</i> . 15 J. Neurosci. 3653-61 (1995)
AO	Price, J., et al. <i>Lineage Analysis in the Vertebrate Nervous System by Retrovirus-Mediated Gene Transfer</i> . 84 Developmental Biol. 156-60 (1987)
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AR	Nornes, H.O., et al. <i>Temporal Pattern of Neurogenesis in the Spinal Cord of Rat. I. An Autoradiographic Study — Time and Sites of Origin and Migration and Settling Patterns of Neuroblasts</i> . 73 Brain Res. 121-38 (1974)
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	AV	Chen, E.W., et al, <i>Early Stages in the Development of Spinal Motor Neurons</i> , 320 J. Comp. Neurol. 291-303 (1992)
	AW	Dodd, J., et al, <i>Spatial Regulation of Axonal Glycoprotein Expression on Subsets of Embryonic Spinal Neurons</i> , 1 Neuron 105-16 (1988)
	AX	Erickson, J., et al, <i>Early Stages of Motor Neuron Differentiation Revealed by Expression of Homeobox Gene Islet-1</i> , 256 Science 1555-59 (1992)
	AY	Hirano, M., et al, <i>Gliogenesis in the Rat Spinal Cord: Evidence for Origin of Astrocytes and Oligodendrocytes from Radial Precursors</i> , 21 J. Neurosci. Res. 155-67 (1988)
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	BB	Anderson, D.J., <i>The Neural Crest Cell Lineage Problem: Neuronoiesis?</i> 3 Neuron 1-12 (1989)
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	BG	Kilpatrick, T.J., et al, <i>Cloning and Growth of Multipotential Neural Precursors: Requirements for Proliferation and Differentiation</i> , 10 Neuron 255-65 (1993)
	BH	Bannerman, P.G., et al, <i>Protein Growth Factor Requirements of Rat Neural Crest Cells</i> , 36 J. Neurosci. Res. 46-57 (1993)
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	BM	Raff, M., <i>Glia Cell Diversification in the Rat Optic Nerve</i> , 243 Science 1450-55 (1989)
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	BP	Tempie, S., et al, <i>Isolated Rat Cortical Progenitor Cells are Maintained in Division In Vitro by Membrane-Associated Factors</i> , 120 Development 999-1008 (1994)
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	BR	Cameron, R.S., et al, <i>Glia Cell Lineage in Cerebral Cortex: A Review and Synthesis</i> , 4 Glia 124-37 (1991)
	BS	Chan, C.L., et al, <i>Oligodendrocyte-type 2 Astrocyte (O-2A) Progenitor Cells from Neonatal and Adult Rat Optic Nerve Differ in Their Responsiveness to Platelet-Derived Growth Factor</i> , 55 Brain Res. Dev. Brain Res. 275-82 (1990)
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BX		Gard, A.L., et al, <i>Oligodendroblasts Distinguished from O-2A Glial Progenitors by Surface Phenotype (O4+GalC-) and Response to Cytokines Using Signal Transducer LIFR</i> 0. 167 Dev. Biol. 596-608 (1995)
BY		Hardy, R., et al, <i>Proliferation and Differentiation Potential of Rat Forebrain Oligodendroglial Progenitors Both In Vitro and In Vivo</i> , 111 Development 1061-80 (1991)
BZ		Hardy, R.J., et al, <i>Oligodendrocyte Progenitors Are Generated Throughout the Embryonic Mouse Brain, But Differentiate in Restricted Foci</i> , 122 Development 2059-69 (1996)
CA		Knapp, P.E., <i>Studies of Glial Lineage and Proliferation In Vitro Using an Early Marker for Committed Oligodendrocytes</i> , 30 J. Neurosci. Res. 336-45 (1991)
CB		Luskin, M.B., et al, <i>Neurons, Astrocytes, and Oligodendrocytes of the Rat Cerebral Cortex Originate from Separate Progenitor Cells: An Ultrastructural Analysis of Clonally Related Cells</i> , 13 J. Neurosci. 1730-50 (1993)
CC		Miller, R.H., <i>Oligodendrocyte Origins</i> , 19 TINS 92-96 (1996)
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CG		Eisenbarth, G.S., et al, <i>Monoclonal Antibody to Plasma Membrane Antigen of Neurons</i> , 76 Proc. Nat'l Acad. Sci. USA 4913-17 (1979)
CH		Geisert, E.E., et al, <i>The Neuronal Response to Injury As Visualized by Immunostaining of Class <math>\beta</math>-tubulin in the Rat</i> , 102 Neurosci. Lett. 137-41 (1989)
CI		Sommer, I., et al, <i>Monoclonal Antibodies (O1-O4) to Oligodendrocyte Cell Surfaces: An Immunocytochemical Study in the Central Nervous System</i> , 83 Dev. Biol. 311-27 (1981)
CJ		Trimmer, P.A., et al, <i>Combination of In Situ Hybridization and Immunocytochemistry to Detect Messenger RNAs in Identified CNS Neurons and Glia in Tissue Culture</i> , 39 J. Histochem. Cytochem. 891-8 (1991)
CK		Wysocki, L.J., et al, <i>"Panning" for Lymphocytes: A Method for Cell Selection</i> , 75 Proc. Nat'l Acad. Sci. 2844-48 (1978)
CL		Mayer, M., et al, <i>Ciliary Neurotrophic Factor and Leukemia Inhibitory Factor Promote the Generation, Maturation, and Survival of Oligodendrocytes</i> , 120 Development 142-53 (1994)
CM		Bottenstein, J.E., et al, <i>Growth of Rat Neuroblastoma Cell Line in Serum-Free Supplemented Medium</i> , 76 Proc. Nat'l Acad. Sci. USA 514-17 (1979)
CN		Lillien, L.E., et al, <i>Differentiation Signals in the CNS: Type-2 Astrocyte Development In Vitro as a Model System</i> , 5 Neuron 5896-6273 (1990)

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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.